ASSESSING CARDIOVASCULAR RISK AND PROGRESSION

# PROGRAM AND REGISTRATION

#### **CO-CHAIRS**

Peter Libby, M.D.

Mallinckrodt Professor of Medicine
Harvard Medical School and
Chief Cardiovascular Medicine
Brigham and Women's Hospital

Jean-Claude Tardif, M.D., FRCPC, FACC
Director, MHI Research Center
Professor of Medicine
CIHR Chair in Atherosclerosis
Montreal Heart Institute

#### The objectives of this program are to:

- Examine the pathogenesis of cardiovascular disease
- Provide information on established and novel biomarkers and imaging technologies
- Identify issues in cardiovascular biomarker identification and application
- Create efficiencies toward improved patient healthcare

This meeting is co-sponsored by:

Montreal Heart Institute

and

U.S. Department of Health and Human Services

U.S. Food and Drug Administration

Center for Food Safety and Applied Nutrition





# CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM WELCOME

#### Dear Colleague:

We are pleased to invite you to participate in the 4th Annual Cardiovascular Biomarkers and Surrogate Endpoints Symposium, September 18-20, 2006 at the Bethesda North Marriott Hotel and Conference Center in Bethesda, Maryland. This outstanding scientific program addresses current approaches for assessing and managing cardiovascular risk, as well as state-of-the-art strategies for assessing effects of novel therapeutics for cardiovascular disorders. The meeting will focus on strategies to identify, manage and monitor patients with cardiovascular disease, with special emphasis on the drug development challenges.

Given the growing prevalence of cardiovascular disease and an expanding population at risk for future events, healthcare systems will likely face more pressure, rather than less, in coming years. We urgently require tools to address the residual burden of cardiovascular risk that represents a major challenge to human health worldwide in the coming decades. Future biomarker efforts are an integral part of this toolbox and must continue to build on knowledge gained from basic research efforts and clinical evaluations, incorporating lessons from past successes and failures. The appropriate application of cardiovascular biomarkers requires an intimate understanding of disease natural history, the mechanism of the intervention, and the characteristics and limitations of the biomarker. The Cardiovascular Biomarkers and Surrogate Endpoints Symposium is designed to share knowledge and encourage the collaborative efforts needed to accelerate the development of improved cardiovascular diagnostics and therapeutic strategies.

Join us to learn how to translate the latest research findings to improvements in the diagnosis, treatment, and prevention of cardiovascular diseases. Presentations from more than 25 thought-leaders will examine the issues surrounding the use of cardiovascular biomarkers and imaging technologies. We wish to express sincere thanks to all of you who have helped get this annual symposium off to a successful start. To keep up the momentum, we encourage everyone to attend this year's annual meeting and to spread the word within your organizations and local institutions. Only with your support can we advance the field of cardiovascular biomarkers and find efficiencies toward the development of new therapeutics.

Sincerely,

Peter Libby Chief, Cardiology

Brigham and Women's Hospital

Jean-Claude Tardif Director, Research

Jan and Tandy

Montreal Heart Institute

Therese Heinonen Associate Director Montreal Heart Institute Coordinating Center

#### <u>CME</u>

The Continuing Medical Education (CME) office of the University of Montreal, Canada designates this an education activity. Each physician should claim only those hours of credit that he/she actually spent in the educational activity. The CME office of the University of Montreal, Canada is fully accredited by the Canadian Association of Medical Schools (CACMS), by the Quebec College of Physicians (QCP), and by reciprocity by the American Council of CME (ACCME). If you would like to receive a statement of credit, you must attend the program and return the credit request and evaluation form provided at the registration desk.

#### **Hotel Accommodations**

To secure your room at the Bethesda North Marriott, please contact the Bethesda North Marriott Reservations at <a href="https://www.stayatmarriott.com/CBSES2006/">www.stayatmarriott.com/CBSES2006/</a> or call 800-228-9290 or 301-984-0004 and state you are attending the Biomarkers Symposium. A special room rate is available for symposium attendees. Hotel space is limited, so do not delay making your reservations.



# 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM FACULTY

#### Michelle A. Albert, M.D., M.P.H.

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#### Lawrence J. Appel, M.D, M.P.H.

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#### Robert Gerszten, M.D.

Professor of Medicine Massachusetts General Hospital Boston, MA

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Office of Clinical Pharmacology Center for Drug Evaluation and Research U.S. Food and Drug Administration Silver Spring, MD

#### Philip Greenland, M.D.

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Feinberg School of Medicine-Northwestern University Chicago, IL

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Seattle, WA

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#### Philippe L'Allier, M.D.

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#### Joao Lima, M.D.

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#### Frank Sacks, M.D.

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#### Ernst J. Schaefer, M.D.

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#### Paula R. Trumbo, Ph.D.

Team Leader, Nutrition Science Evaluation Office of Nutritional Products, Labeling and Dietary Supplements Center for Food Safety and Applied Nutrition US Food and Drug Administration College Park, MD

### **REGISTRATION FORM** Registration Deadline—September 15, 2006 September 18-20, 2006 Bethesda North Marriott otel & Conference Center Bethesda, Maryland CARDIOVASCULAR BIOMARKERS URROGATE ENDPOINTS SYMPOSIUM Registration Fee: Before July 15, 2006 After July 15, 2006 otel Government Employees (full-time): Payment must be received prior to September 15<sup>th</sup>. Registrations will be confirmed by email т or fax. Participants are responsible for making their own hotel and travel arrangements.

#### Please Print

Prefix First Name	Last Name	Degree Initials
Title	Organization	
Mailing Address	City	State/Province/Region
Billing Address**	City	State/Province/Region
Postal Code Country	Email Address	
Phone Number	Fax Number	

Mail completed registration form and check payable to: Clinical Lynx, Inc., 828 West Grand River Avenue, Brighton, MI, 48116 USA PLEASE CONSIDER THIS FORM AN INVOICE.

OR CHARGE (circle one): Visa MasterCard **American Express** 

Expiration Date	Account Number
Signature	

\*If paying by credit card, billing address must match credit card holder address.

For CREDIT CARD PAYEES ONLY: To expedite your registration, please fax this form to Clinical Lynx at 810-494-7122

Cancellation and Refund Policy Deadlines

All cancellation requests must be made in writing and sent to Clinical Lynx, Inc. Registrants who submit cancellation requests that are received on or before August 20, 2006 will receive a refund equal to the registration fee paid less a \$100 administrative fee. Registrants who submit cancellation requests that are received between August 21 and September 15, 2006 will receive a refund equal to fifty percent (50%) of the registration fee paid. Cancellation requests received on or after September 16, 2006 will not be honored and no portion of the registration fee will be refunded.

Please note in the event that the 2006 Cardiovascular Biomarkers and Surrogate Endpoints Symposium is abbreviated or cancelled because of fire, explosion, strike, freight embargo, epidemic catastrophe, act of God, or the act of a public enemy including, but not limited to, an act of any government, de jure or de facto or agency or official thereof, Clinical Lynx, Inc. reserves the right, in its sole discretion to unilaterally terminate the conference. In such cases, the registrant hereby agrees to waive any claim he, she or it may have against Clinical Lynx, Inc. for damages or compensation, including but not limited to fees for registration, housing, airfare and incidental charges

Contact the Bethesda North Marriott Hotel at: www.stayatmarriott.com/CBSES2006/

#### **REGISTER TODAY—FAX YOUR REGISTRATION FORM TO 810-494-7122**

contact us at symposium@clinicallynx.com for more information.

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\$640.00 \$695.00

\$175.00

# 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM AGENDA OVERVIEW

#### Monday, September 18th

11:30 a.m. - 12:00 p.m. Registration and Complimentary Buffet Lunch

12:00 p.m. - 12:45 p.m. Welcome and Conference Objectives, Dr. Jean-Claude Tardif and Dr. Therese Heinonen

12:45 p.m. - 4:45 p.m. Scientific Sessions and Expert Panel Discussions

4:45 p.m. End of Day 1

7:00 p.m. Meet the Faculty Reception and Dinner (all participants)

#### Tuesday, September 19th

7:30 a.m. - 11:30 a.m. Scientific Sessions and Expert Panel Discussions

11:30 a.m. - 12:30 p.m. Complimentary Buffet Lunch

12:30 p.m. - 4:30 p.m. Scientific Sessions and Expert Panel Discussions

4:30 p.m. End of Day 2

#### Wednesday, September 20th

7:30 a.m. - 11:30 a.m. Scientific Sessions and Expert Panel Discussions

11:30 a.m. - 12:30 p.m. Complimentary Buffet Lunch

12:30 p.m. - 3:30 p.m. Scientific Sessions and Expert Panel Discussions

3:30 p.m. Closing Remarks

## SCIENTIFIC SESSION PRESENTATIONS

Pathogenesis of Atherothrombotic Disease and Biomarker Identification

Biomarkers in Acute Coronary Syndrome

Markers of Thrombosis and Anti-thrombotic Therapy

Biomarkers in Diabetes, Metabolic Syndrome and Renal Disease

Biomarkers in Cerebrovascular Disease

Biomarkers in Heart Failure

Biomarker Discovery and the Challenges of Validation

Surrogate Endpoints in Clinical Trials

Genomic Biomarker Validation and Pharmacogenomic Initiatives at the FDA

Lipoproteins and Other Related Risk Factors

Markers of Dysfunctional HDL in Coronary Artery Disease

Targeted Molecular and Cellular Imaging

The Role of Imaging in Disease Detection and Treatment

Measures of Cardiac Structure and Function by Magnetic Resonance Imaging

Current Status of Disease Assessment with Carotid Ultrasound

Cardiac Computed Tomography Angiography/Positron Emission Tomography

Special Considerations Based on Gender, Age, and Ethnicity

New Insights Based on Technological Advances and Landmark Trials

The FDA Critical Path Initiative - Opportunities and Challenges

The Need for Biomarkers in Drug Development

The Use of Biomarkers for FDA Regulatory Decision Making - Metabolism and Endocrine

The Use of Biomarkers for FDA Regulatory Decision Making - Cardio-Renal The Use of Biomarkers for FDA Regulatory Decision Making – Health Claims

Canadian Regulatory View on Cardiovascular Biomarkers and Surrogate Endpoints in Clinical Trials

European Regulatory View on Cardiovascular Biomarkers and Surrogate Endpoints in Clinical Trials

Integrating Biomarkers into Public Healthcare

Clinical Application of Biomarkers

NIH Cardiovascular Biomarker Initiatives

The Balance Between Safety and Efficacy: Biomarkers as Safety Surrogates

# 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM AGENDA

# Monday, September 18<sup>th</sup>

11:30am – 12:00pm	Registration and Buffet Lunch
12:00pm - 12:15pm	Welcome and Conference Objectives  Dr. Jean-Claude Tardif and Dr. Therese Heinonen
12:15pm - 12:45pm	Keynote address  Dr. Scott Gottlieb  Deputy Commissioner for Medical and Scientific Affairs  United States Food and Drug Administration
12:45pm - 1:15pm	Pathogenesis of Atherothrombotic Disease and Biomarker identification Dr. Peter Libby (Brigham and Women's Hospital)
1:15pm – 1:45pm	Biomarkers in Acute Coronary Syndrome  Dr. David Morrow (TIMI Study Group, Brigham and Women's Hospital)
1:45pm – 2:15pm	Thrombosis: New Strategies for Anti-thrombotic Therapies  Dr. Bruce Furie (Harvard Medical School)
2:15pm – 2:45pm	Biomarkers in Diabetes, Metabolic Syndrome and Renal Disease  Dr. Steven Haffner (University of Texas Health Centers)
2:45pm – 3:15pm	Biomarkers in Cerebrovascular Disease  Dr. Pierre Amarenco (Bichat- Claude Bernard University Hospital)
3:15pm – 3:45pm	Biomarkers in Heart Failure  Dr. James De Lemos (University of Texas-Southwestern Medical School)
3:45pm – 4:45pm	EXPERT PANEL DISCUSSIONS – Moderators: Peter Libby and Allan Jaffe (panelists include J.C. Tardif, D. Morrow, B. Furie, S. Haffner, P. Amarenco, D. Mann and E. Rimm)

Conclusion - Day 1

# 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM

# **AGENDA**

# Tuesday, September 19<sup>th</sup>

7:30am – 8:00am	Biomarker Discovery and The Challenges of Validation  Dr. Robert Gerszten (Massachusetts General Hospital)
8:00am – 8:30am	Surrogate Endpoints in Clinical Trials  Dr. Paul Ridker (Brigham and Women's Hospital)
8:30am – 9:00am	Genomic Biomarker Validation and Pharmacogenomic Initiatives at the FDA Dr. Federico Goodsaid (FDA Office of Clinical Pharmacology)
9:00am – 9:30am	Lipoproteins and Other Related Risk Factors  Dr. H. Bryan Brewer (Cardiovascular Research Institute)
9:30am – 10:00am	Markers of Dysfunctional HDL in Coronary Artery Disease  Dr. Jay Heinecke (University of Washington)
10:00am –10:30am	Targeted Molecular and Cellular Imaging  Dr. Jonathan Lindner (Division of Cardiovascular Medicine)
10:30am – 11:30am	EXPERT PANEL DISCUSSIONS – Moderators: Philip Greenland and Paul Ridker (panelists include R. Gerszten, P. Ridker, F. Goodsaid, H. B. Brewer, J. Heinecke, J. Lindner, J. C. Tardif, P. Libby, R. Krauss, and F. Sacks)
11:30am – 12:30pm	LUNCH BREAK
12:30pm – 1:00pm	The Role of Imaging in Disease Detection and Treatment  Dr. Jean-Claude Tardif (Montreal Heart Institute)
1:00pm - 1:30pm	Measures of Cardiac Structure and Function by MRI  Dr. Joao Lima (Johns Hopkins Medical School)
1:30pm – 2:00pm	Current Status of Disease Assessment with Carotid Ultrasound  Dr. Allen Taylor (Walter Reed Army Medical Center)
2:00pm – 2:30pm	Cardiac CT and CT/PET  Dr. Zahi Fayad (Mount Sinai School of Medicine)
2:30pm - 3:00pm	Special Considerations Based on Gender, Age and Ethnicity  Dr. Michelle Albert (Harvard Medical School)
3:00pm - 3:30pm	New Insights Based on Technological Advances and Landmark Trials  Dr. Robert Harrington (Duke University)
3:30pm - 4:30pm	EXPERT PANEL DISCUSSIONS – Moderators: Jean-Claude Tardif and Joao Lima (panelists include A. Taylor, Z. Fayad, M. Albert, R. Harrington, P. L'Allier, P. Libby, and L. Appel)

Conclusion – Day 2

# 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM AGENDA

# Wednesday, September 20<sup>th</sup>

7:30am – 8:00am	The FDA Critical Path Initiative – Opportunities and Challenges  Dr. Douglas Throckmorton (FDA Cardio-Renal)
8:00am – 8:30am	The Need for Biomarkers in Drug Development  Dr. David G. Orloff (former FDA/Medpace)
8:30am – 9:00am	The Use of Biomarkers for FDA Regulatory Decision Making – Metabolism and Endocrine Dr. Mary Parks (FDA Metabolism and Endocrine)
9:00am – 9:30am	The Use of Biomarkers for FDA Regulatory Decision Making – Cardio-Renal Dr. Norman Stockbridge (FDA Metabolism and Endocrine)
9:30am – 10:00am	Canadian Regulatory View on Cardiovascular Biomarkers and Surrogate Endpoints in Clinical Trials  Dr. Agnes Klein (Health Canada)
10:00am –10:30am	European Regulatory View on Cardiovascular Biomarkers and Surrogate Endpoints in Clinical Trials  Dr. Clemens Mittmann (Federal Institute for Drug and Medical Devices)
10:30am – 11:00am	The Use of Biomarkers for FDA Regulatory Decision Making - Health Claims Dr. Paula Trumbo (FDA Nutrition Science Evaluation)
11:00am - 12:00pm	EXPERT PANEL DISCUSSIONS – Moderators: Robert Harrington and Eric Brass (panelists include D. Throckmorton, D. Orloff, M. Parks, N. Stockbridge, A. Klein, C. Mittmann, and P. Trumbo)
12:00pm - 12:30pm	LUNCH BREAK
12:30pm - 1:00pm	Integrating Biomarkers into Public Healthcare  Dr. Gurvaneet Randhawa (US Agency for Healthcare Research and Quality)
1:00pm - 1:30pm	Clinical Application of Biomarkers  Dr. Robert Balaban (NHLBI/NIH)
1:30pm – 2:00pm	NIH Cardiovascular Biomarker Initiatives  Dr. Christopher O'Donnell (NHLB I/NIH)
2:00pm – 2:30pm	The Balance Between Safety and Efficacy: Biomarkers as Safety Surrogates  Dr. Eric Brass (UCLA Medical Center)
2:30pm - 3:30pm	EXPERT PANEL DISCUSSIONS – Moderators: Jean-Claude Tardif and Peter Libby (panelists include G. Randhawa, R. Balaban, C. O'Donnell, E. Brass, P. Greenland, and M. Prescott)
3:30pm	Closing Remarks  Drs. Peter Libby and Jean-Claude Tardif

Conclusion - Day 3

## 2006 CARDIOVASCULAR BIOMARKERS AND SURROGATE ENDPOINTS SYMPOSIUM

## Participating Institutions

Agency for Healthcare Research and Quality Mayo Medical School

Amgen Medpace, Inc.

AstraZeneca MedStar Research Institute, Cardio Res Institute

AstraZeneca R & D Merck & Co., Inc.

AtheroGenic, Inc. Merck Research Laboratories

Atherochem Merck/Rosetta

Baylor Heart Clinic, Baylor College of Medicine

Bichat-Claude Bernard Univ Hosp & Med School

Mt. Sinai Medical Center

Boehringer Ingelheim Pharmaceuticals

National Institutes of Health

Brigham and Women's Hospital Northwestern University (Feinberg School of Medicine)

Bristol-Myers Squibb Novartis Pharmaceuticals

Children's Hospital Oakland Research Institute Novo Nordisk Inc.

Daiichi Sankyo Inc Oregon Health & Science University

Duke University Medical Center Ortho-Clinical Diagnostics

Eli Lilly and Co Pfizer Inc
EPIX Pharmaceuticals PPL Clinic

Esperion Therapeutics, A Pfizer Inc. Company Roche Diagnostics

Federal Institute for Drugs & Medical Devices(BfArM) Schering-Plough

GE Healthcare Sunhealth Research Institute

GlaxoSmithKline Surface Logix, Inc.

Harbor-UCLA Medical Center Tufts University

Harvard Medical School Union-Plainfield Medical

Health Canada United States Food and Drug Administration (FDA)

I.R.I.S. (Laboratories Servier) University of Texas Health Centers

Institut de Recherches Internationales Servier University of Texas-Southwestern Medical School

Johns Hopkins Medical Institutions University of Washington

Johnson & Johnson Vivian Medical Spa
LipoScience, Inc. Walter Reed Army Medical Center

Massachusetts General Hospital Wyeth Research